

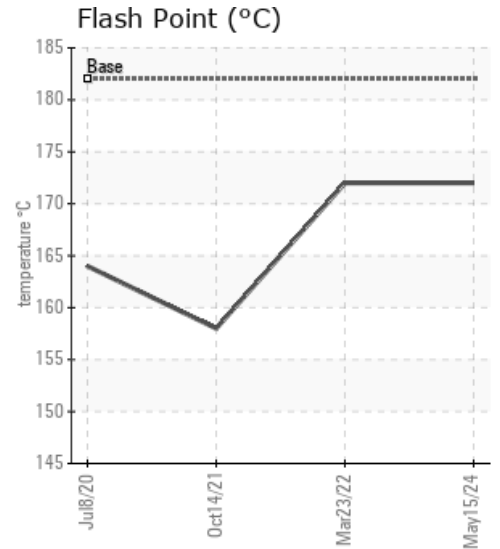
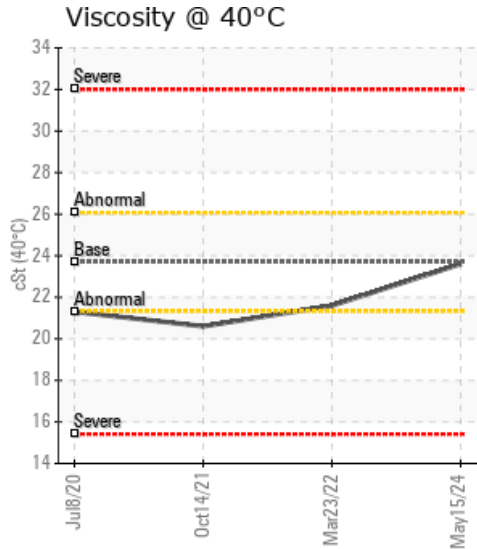
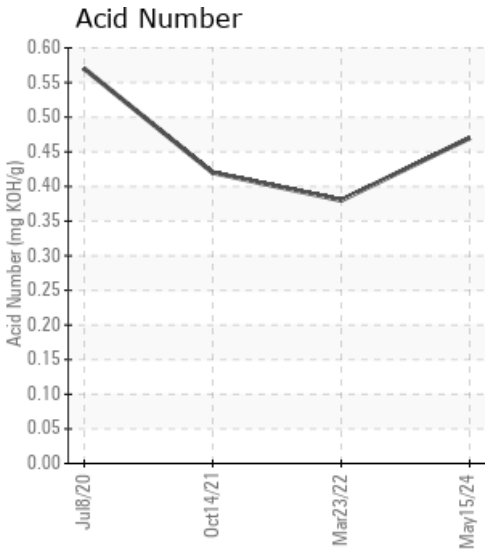
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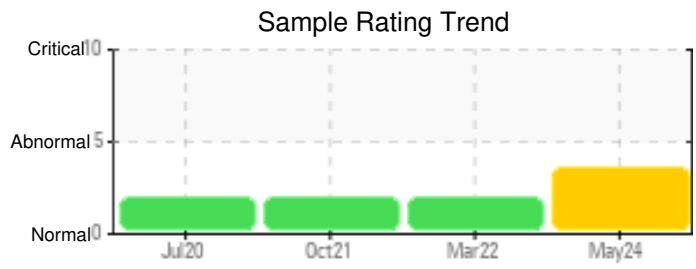
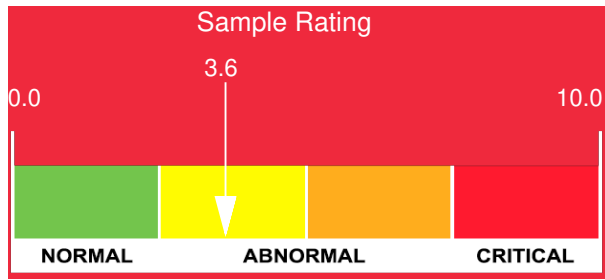
Customer: PTRHTF60010	System Information	Sample Information
SYNLUBE INTERNATIONAL CO LTD 76/1 MOO.7 THACHIN MUANG SAMUTSAKHON, 74000 TH Attn: CHERNPORN CHOBKUI Tel: 034421290 E-Mail: chernporn@synlube.co.th	System Volume: 30000 ltr Bulk Operating Temp: 518F / 270C Heating Source: Blanket: Fluid: EASTMAN THERMINOL XP Make:	Lab No: 02637567 Analyst: Bill Quesnel CLS,OMA II,MLA-III,LLA-I Sample Date: 05/15/24 Received Date: 05/24/24 Completed: 05/29/24 Bill Quesnel CLS,OMA II,MLA-III,LLA-I

Recommendation: The fluid shows signs of thermal cracking and decomposition (low boilers and high pentane insoluble content). We recommend that you vent the expansion tank to remove low boilers which assists in restoring the flash point of the fluid. The fluid is suitable for further service. Resample at the next service interval to monitor.

Comments: Pentane Insolubles levels are severely high. (GCD) 90% Distillation Point is severely high.

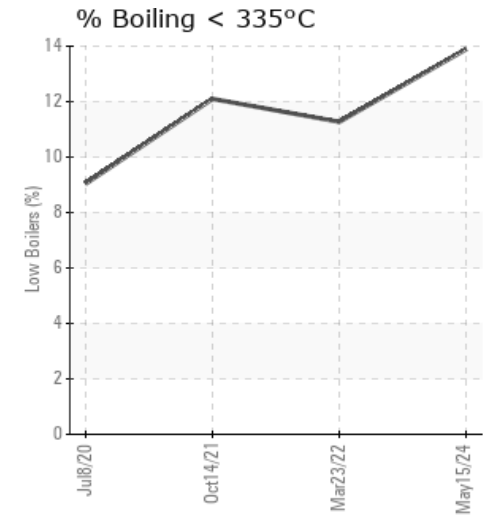
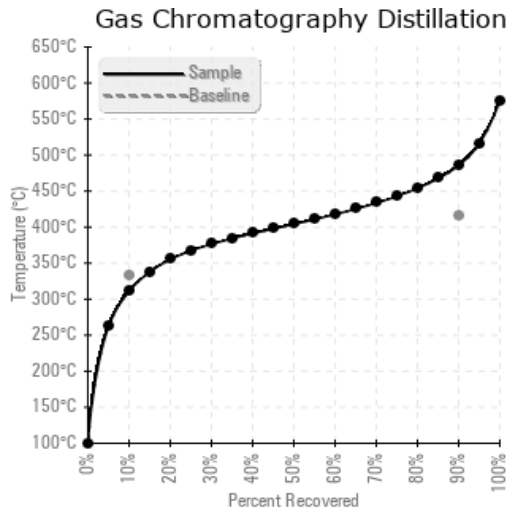
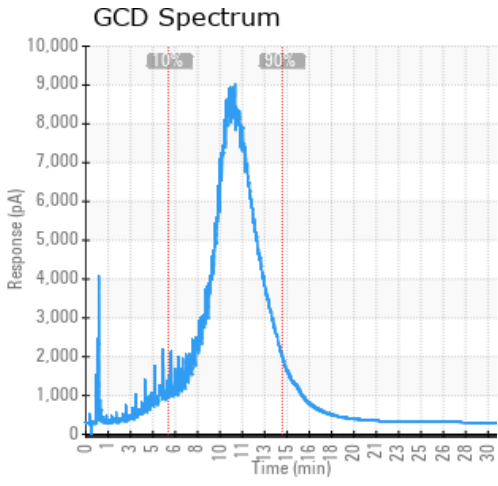
Sample Date	Received Date	Fluid Age	Sample Location	Flash Point (COC)	Water (KF)	Viscosity (40°C)	Acid Number	Solids	GCD 10%	GCD 50%	GCD 90%	GCD % < 335°C
	mm/dd/yy			°F/°C	ppm	cSt	mg/KOH/g	%wt	°F/°C	°F/°C	°F/°C	%
05/15/24	05/24/24	66.0m		342 / 172	68	23.6	0.47	1.26	592 / 311	759 / 404	906 / 486	13.89
03/23/22	04/05/22	41.0m		342 / 172	135.0	21.6	0.38	0.137	617 / 325	770 / 410	914 / 490	11.27
10/14/21	10/28/21	36.0m	Firer No. 8	316 / 158	125.5	20.6	0.42	0.295	610 / 321	763 / 406	901 / 483	12.10
07/08/20	08/25/20	24.0m		327 / 164	37.1	21.3	0.57	0.278	639 / 337	769 / 409	901 / 483	9.04
Baseline Data				360 / 182		23.7			630 / 332		781 / 416	





Sample Date	Iron	Chromium	Nickel	Aluminum	Copper	Lead	Tin	Cadmium	Silver	Vanadium	Silicon	Sodium	Potassium	Titanium	Molybdenum	Antimony	Manganese	Lithium	Boron	Magnesium	Calcium	Barium	Phosphorus	Zinc
05/15/24	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03/23/22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10/14/21	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07/08/20	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Baseline Data			0	0						0			0	0					0				0	

Elemental analysis results (above) in parts per million (ppm). [10,000 ppm = 1.0%]



Historical Comments

03/23/22	This is not a Petro-Canada Lubricants product and cannot comment with accuracy on the chemistry here. I can state that from the GCD Distillation, the line shows evidence of continued thermal cracking. Resample at next interval to monitor. (GCD) 90% Distillation Point is severely high.
10/14/21	This is not a Petro-Canada Lubricants product and cannot comment with accuracy on the chemistry here. I can state that from the GCD Distillation, the line shows evidence of thermal cracking. Resample at next interval to monitor. (GCD) 90% Distillation Point is severely high.
07/08/20	This is not a Petro-Canada Lubricants product and cannot comment with accuracy on the chemistry here. I can state that from the GCD Distillation, the line shows evidence of thermal cracking (GCD) 90% Distillation Point is severely high.

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